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Christopher M. Goff (27839) ARMSTRONG TEASDALE LLP ONE METROPOLITAN SQUARE SUITE 2600 ST. LOUIS, MO 63102			EXAMINER CHRISS, JENNIFER A	
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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* PEIGUANG ZHOU and TIMOTHY JAMES BLENKE

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Appeal 2008-2935  
Application 09/945,239  
Technology Center 1700

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Decided: July 14, 2008

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Before BRADLEY R. GARRIS, LINDA M. GAUDETTE, and  
MICHAEL P. COLAIANNI, *Administrative Patent Judges*.

COLAIANNI, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134 the final rejection of claims 24-33 and 70-82. We have jurisdiction over the appeal pursuant to 35 U.S.C. § 6(b).

We AFFIRM.

## INTRODUCTION

Appellants claim a laminated structure comprising a first layer attached to at least a portion of a second layer, wherein the second layer is a neck-bonded laminate substrate, using an adhesive composition having selected ratios of atactic and isotactic polymers as recited in claim 24. Appellants disclose the claimed adhesive compositions have better performance characteristics and/or cost less than conventional hot-melt adhesives (Spec. 4).

Claims 24 and 70 are illustrative:

24. A laminated structure comprising at least a portion of a first layer attached to at least a portion of a second layer using an adhesive composition, the adhesive composition comprising an atactic polymer having a degree of crystallinity of less than about 20% and a number-average molecular weight between about 1,000 and about 300,000, and an isotactic polymer having a degree of crystallinity of at least about 40% and a number-average molecular weight between about 3,000 and about 200,000, wherein the first layer is a neck-bonded laminate substrate.

70. A laminated structure comprising a first neck-bonded laminate substrate and a second neck-bonded laminate substrate, said first neck-bonded laminate substrate being bonded to said second neck-bonded laminate substrate with an adhesive composition comprising an atactic polymer having a degree of crystallinity of less than about 20% and a number-average molecular weight of from about 1,000 to about 300,000 and an isotactic polymer having a degree of crystallinity of at least about 40% and a number-average molecular weight of from about 3,000 to about 200,000.

The Examiner relies on the following prior art references as evidence of unpatentability:

Hall	3,370,106	Feb. 20, 1968
Tanzer	WO 01/15646 A1	Mar. 8, 2001

The rejection as presented by the Examiner is as follows:

1. Claims 24-33 and 70-82 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Tanzer in view of Hall.

Appellants only argue independent claims 24 and 70. Because Appellants' arguments regarding claim 70 are identical to those presented regarding the rejection of claim 24, we focus on claim 24, the broadest claim on appeal, in the Decision.

The Examiner finds that Tanzer discloses all the features of claim 24, except the claimed adhesive composition (Ans. 3-4). The Examiner finds that Hall discloses an adhesive having the same features claimed by Appellants and useful for bonding textiles and other materials (Ans. 5 and 8). The Examiner concludes that it would have been obvious to use Hall's adhesive composition in Tanzer's laminated diaper structure to produce a composite containing a low-cost adhesive with high performance properties (Ans. 5 and 8).

#### OPINION

Appellants do not contest that all the features of claim 24 are taught or suggested by the combination of Tanzer in view of Hall. Rather, Appellants argue that there is no motivation for combining Hall's adhesive composition with Tanzer's absorbent composite structure comprising a disposable nonwoven material (Br. 8-10). Appellants contend that Wang (U.S. 6,329,468) teaches that the use of atactic and isotactic polymers in adhesive compositions for use in disposable nonwoven applications has many

disadvantages (Br. 11-12). Appellants argue that Wang teaches away from combining an atactic-isotactic polymer blend adhesive with disposable nonwoven material (i.e., neck-bonded laminates) (Br. 12-13).

We have considered all of Appellants' arguments and are unpersuaded for the reasons below.

Since Appellants do not contest the teachings of Tanzer and Hall, we adopt the Examiner's findings regarding Tanzer and Hall as our own. We note that Hall discloses that it is known to use hot melt adhesives for "bonding wood, paper, plastics, textiles and other materials" (Hall, col. 1, ll. 36-37). Hall further discloses that by blending atactic and isotactic polypropylene, a low-cost, high performance hot melt adhesive may be obtained (Hall, col. 1, ll. 46-50).

At the outset, Appellants reliance on Wang as teaching away from the combination of Hall's adhesive with Tanzer's absorbent composite is not persuasive for two reasons. First, Appellants have not established that Hall's and Wang's atactic-isotactic polymer blends contain the same types of atactic and isotactic polymers. Rather, Appellants admit that Wang does not specifically discuss the adhesive of Hall (Br. 14).

Second, the nature of Wang's teaching is not considered a teaching away. A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant. *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994). The degree of teaching away will of course depend on the particular facts; in general, a reference will teach away if it suggests that the

line of development flowing from the reference's disclosure is unlikely to be productive of the result sought by the applicant. *Id.*

Wang discloses that amorphous poly- $\alpha$ -olefins (APAO) “have not found *much* use in disposable nonwoven applications where a combination of high bond strength at very low coating weight and easy processability by spray techniques . . . is required . . . APAO based adhesives *usually* lack such capability” (emphasis added) (Wang, col. 3, ll. 42-47). Wang further discloses that the discussed “prior art APAO adhesives *are formulated* for applications other than for disposable nonwoven products and usually lack sprayability” (emphasis added) (Wang, col. 4, ll. 16-19).

These Wang disclosures indicate that APAOs have found use in disposable nonwovens, albeit a small amount of use, where the APAOs possess the desirable sprayability property (i.e., Wang’s “usually lack such capability” disclosure plainly indicates that some APAO adhesives contain the desired property). Furthermore, Wang’s disclosure that prior art APAOs “are formulated” for applications other than disposable nonwoven products (i.e., made especially for use with materials other than nonwovens) does not establish that Hall’s adhesive composition is similarly formulated.

Appellants have not proffered any evidence that Hall’s composition is formulated for uses other than disposable nonwoven products.

In light of the foregoing and based on Hall’s and Tanzer’s disclosures, we agree with the Examiner that it would have been obvious to combine Hall’s adhesive with Tanzer’s absorbent composite to produce a composite containing a low-cost adhesive with high performance properties (Ans. 5). Hall’s disclosure to use the adhesive composition with “textiles and other materials” would have suggested using the adhesive with nonwoven

materials, and one would have reasonably expected that using the adhesive with nonwoven materials would have been successful.

Additionally, we determine that using Hall's adhesive composition with Tanzer's absorbent composite would have been obvious because such is merely the predictable use of a prior art element (i.e., an adhesive) according to its established function (i.e., bonding two substrates together). *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1740 (2007).

For the above reasons, we sustain the Examiner's § 103 rejection of claims 24-33 and 70-82 over Tanzer in view of Hall.

#### DECISION

The Examiner's decision is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

#### AFFIRMED

PL Initial:  
sld

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